### INTERNATIONAL STANDARD



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# Information technology — Multimedia application format (MPEG-A) —

Part 7: **Open access application format** 

Technologies de l'information — Format pour application multimédia (MPEG-A) —

Partie 7: Format pour application d'accès ouvert



Reference number ISO/IEC 23000-7:2008(E)

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### Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 23000-7 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

ISO/IEC 23000 consists of the following parts, under the general title *Information technology — Multimedia application format (MPEG-A)*:

- Part 1: Purpose for multimedia application formats [Technical Report]
- Part 2: MPEG music player application format
- Part 3: MPEG photo player application format
- Part 4: Musical slide show application format
- Part 5: Media streaming application format
- Part 7: Open access application format
- Part 8: Portable video application format
- Part 9: Digital multimedia broadcasting application format
- Part 10: Video surveillance application format

#### Introduction

The open access application format is a format to ease the exchange and promotion of open contents. It is designed for the cases where users own rights to a piece of content and have an interest in releasing it in such a way that other users can freely access it. However, the users do not want to make the content public domain. Users want to release a piece of content that is governed in a "light-weight" form. This type of release is called "open access" and the set of technologies that support it is called open access application format.

Examples of open access contents are publicity material and teasers. One important set of major potential applications is represented by the BBC's Creative Archive project. Another important application is in the scientific area, where publications, research results or e-learning material are published.

Open access is an application format (AF) and is specified as Part 7 of MPEG-A (ISO/IEC 23000-7). The open access AF defines a packaging format that can contain any type of content. Additionally, the AF contains a license for each content, which describes how the content may be used. These licenses are created by the authors of the content, who want to publish their content, but still want to retain some specific rights. The license is in a machine-readable format and helps the consumer to understand, what he is allowed to do with the content. Furthermore it enables the usage of automatic processing and interpretation of these licenses.

The open access AF is a standardized and interoperable solution for the release and exchange of contents. It enables the author of a content to package his creation into a single container and publish it together with a predefined license. It is designed to emphasize the exchange of contents and the re-usage or derivation of the contents by other users.

## Information technology — Multimedia application format (MPEG-A) —

# Part 7: **Open access application format**

#### 1 Scope

This International Standard specifies a container format, which can contain any type of content and can also transport additional metadata. This packaging mechanism offers the possibility to enrich the content with human and machine-readable metadata and is not limited to a specific content type. Unlike other application formats, the open access application format is not a multimedia-based format.

The open access application format doesn't use encryption mechanisms to protect the access of the content. However the content can be protected by digital signatures, which allow the verification of the integrity, authenticity and non-repudiation of the content.

#### 2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3166-1, Codes for the representation of names of countries and their subdivisions — Part 1: Country codes

ISO 3166-2, Codes for the representation of names of countries and their subdivisions — Part 2: Country subdivision code

ISO/IEC 15938-5, Information technology — Multimedia content description interface — Part 5: Multimedia description schemes

ISO/IEC 21000-2, Information technology — Multimedia framework (MPEG-21) — Part 2: Digital Item Declaration

ISO/IEC 21000-3, Information technology — Multimedia framework (MPEG-21) — Part 3: Digital Item Identification

ISO/IEC 21000-5, Information technology — Multimedia framework (MPEG-21) — Part 5: Rights Expression Language

ISO/IEC 21000-9, Information technology — Multimedia framework (MPEG-21) — Part 9: File Format

ISO/IEC 21000-15, Information technology — Multimedia framework (MPEG-21) — Part 15: Event Reporting